

Patente Marken u. Lizenzen

18. April 2005

From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
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(PCT Administrative Instructions, Section 411)

To:

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Date of mailing (day/month/year) 08 April 2005 (08.04.2005)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 0000055383	
International application No. PCT/EP05/001759	International filing date (day/month/year) 19 February 2005 (19.02.2005)
International publication date (day/month/year)	Priority date (day/month/year) 26 February 2004 (26.02.2004)
Applicant BASF AKTIENGESELLSCHAFT et al	

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<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
26 February 2004 (26.02.2004)	10 2004 009 940.5	DE	14 March 2005 (14.03.2005)

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/001759

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C09D11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C09D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	EP 1 457 534 A (KIWA CHEMICAL INDUSTRY CO., LTD) 15 September 2004 (2004-09-15) claims; examples	1-10
P,X	WO 2004/031255 A (BASF AKTIENGESellschaft; KRUEGER, CHRISTIAN; HEES, ULRIKE; VAN GELDER,) 15 April 2004 (2004-04-15) example 4	1-10
X	EP 1 020 499 A (SEIKO EPSON CORPORATION) 19 July 2000 (2000-07-19) paragraph '0013! - paragraph '0024!; examples	1-10
X	US 4 689 078 A (KOIKE ET AL) 25 August 1987 (1987-08-25) examples 2,3	1-10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

14 April 2005

Date of mailing of the international search report

22/04/2005

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2005/001759

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 156 086 A (SEIKO EPSON CORPORATION) 21 November 2001 (2001-11-21) claims; examples -----	1-10
X	EP 1 234 859 A (SEIKO EPSON CORPORATION) 28 August 2002 (2002-08-28) cited in the application paragraph '0012! - paragraph '0014!; examples paragraph '0035! - paragraph '0036! -----	1-10
X	EP 1 333 048 A (AIR PRODUCTS AND CHEMICALS, INC) 6 August 2003 (2003-08-06) cited in the application paragraph '0029!; claim 16 -----	1-10
X	WO 03/052009 A (KIWA CHEMICAL INDUSTRY CO., LTD; MAEKAWA, SHUNJI; TANAKA, HIROKI) 26 June 2003 (2003-06-26) the whole document -----	1-10
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 09, 3 September 2003 (2003-09-03) & JP 2003 128962 A (TORAY IND INC), 8 May 2003 (2003-05-08) abstract -----	1-10
X	PATENT ABSTRACTS OF JAPAN vol. 012, no. 444 (C-545), 22 November 1988 (1988-11-22) & JP 63 168477 A (MITSUBISHI KASEI CORP), 12 July 1988 (1988-07-12) abstract -----	1-10
X	PATENT ABSTRACTS OF JAPAN vol. 011, no. 185 (C-428), 13 June 1987 (1987-06-13) & JP 62 010173 A (MITSUBISHI CHEM IND LTD), 19 January 1987 (1987-01-19) abstract -----	1-10
X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 562 (C-1265), 27 October 1994 (1994-10-27) & JP 06 200200 A (SEIKO EPSON CORP; others: 01), 19 July 1994 (1994-07-19) abstract -----	1-10
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06, 30 April 1998 (1998-04-30) & JP 10 036743 A (KAO CORP), 10 February 1998 (1998-02-10) abstract -----	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/001759

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1457534	A	15-09-2004	AU 2002349526 A1 EP 1457534 A1 US 2004196343 A1 CN 1553942 A WO 03052009 A1 JP 3484187 B2 JP 2003246954 A	30-06-2003 15-09-2004 07-10-2004 08-12-2004 26-06-2003 06-01-2004 05-09-2003
WO 2004031255	A	15-04-2004	DE 10245209 A1 AU 2003270261 A1 WO 2004031255 A1	08-04-2004 23-04-2004 15-04-2004
EP 1020499	A	19-07-2000	EP 1020499 A1 US 6409330 B1 WO 0004103 A1 JP 2004042604 A	19-07-2000 25-06-2002 27-01-2000 12-02-2004
US 4689078	A	25-08-1987	JP 1946134 C JP 3049311 B JP 62053385 A DE 3629854 A1 GB 2181446 A ,B HK 69591 A SG 89591 G	10-07-1995 29-07-1991 09-03-1987 05-03-1987 23-04-1987 06-09-1991 22-11-1991
EP 1156086	A	21-11-2001	EP 1156086 A1 US 2003037699 A1 WO 0148101 A1	21-11-2001 27-02-2003 05-07-2001
EP 1234859	A	28-08-2002	JP 2003253166 A EP 1234859 A1 US 2002157569 A1	10-09-2003 28-08-2002 31-10-2002
EP 1333048	A	06-08-2003	US 2003158448 A1 BR 0300363 A CN 1435403 A EP 1333048 A1 JP 2003238472 A	21-08-2003 09-09-2003 13-08-2003 06-08-2003 27-08-2003
WO 03052009	A	26-06-2003	AU 2002349526 A1 CN 1553942 A EP 1457534 A1 WO 03052009 A1 JP 3484187 B2 JP 2003246954 A US 2004196343 A1	30-06-2003 08-12-2004 15-09-2004 26-06-2003 06-01-2004 05-09-2003 07-10-2004
JP 2003128962	A	08-05-2003	NONE	
JP 63168477	A	12-07-1988	JP 1977166 C JP 7005854 B	17-10-1995 25-01-1995
JP 62010173	A	19-01-1987	JP 1924407 C JP 6051855 B	25-04-1995 06-07-1994
JP 06200200	A	19-07-1994	NONE	
JP 10036743	A	10-02-1998	JP 3024936 B2	27-03-2000

New claims:

1. An aqueous recording fluid comprising
 - 5 (a) at least one colorant which is not completely polymer enveloped, selected from those colorants in particulate form where some colorant particles are completely polymer enveloped and others only incompletely, and those colorants in particulate form wherein some colorant particles are completely polymer enveloped and others not at all,
 - 10 (b) at least two wetting agents selected from alkoxylated alcohols of the formula $R^1O(AO)_x-H$, where R^1 is C_1-C_{30} -alkyl wherein one or else two nonadjacent CH_2 groups may be replaced by oxygen and wherein C_1-C_{30} -alkyl may be unsubstituted or substituted with one or two hydroxyl groups, AO represents alkylene oxide, selected from ethylene oxide, propylene oxide and butylene oxide and x is an integer from 1 to 100, alkoxylated acetylene alcohols, alkoxylated or nonalkoxylated acetylenediols, alkylpolyglucosides, sugar ester alkoxylates, fluorosurfactants, anionic surfactants and cationic surfactants.
- 20 2. An aqueous recording fluid comprising
 - (a) at least one colorant in which at least 0.1% by weight of the colorant particles are not completely polymer enveloped,
 - (b) at least two wetting agents selected from alkoxylated alcohols of the formula $R^1O(AO)_x-H$, where R^1 is C_1-C_{30} -alkyl wherein one or else two nonadjacent CH_2 groups may be replaced by oxygen and wherein C_1-C_{30} -alkyl may be unsubstituted or substituted with one or two hydroxyl groups, AO represents alkylene oxide, selected from ethylene oxide, propylene oxide and butylene oxide and x is an integer from 1 to 100, alkoxylated acetylene alcohols, alkoxylated or nonalkoxylated acetylenediols, alkylpolyglucosides, sugar ester alkoxylates, fluorosurfactants, anionic surfactants and cationic surfactants.
- 35 3. The recording fluid according to claim 1 or 2, comprising (c) at least one dispersant.
4. The recording fluid according to at least one of claims 1 to 3, comprising two wetting agents (b1) and (b2) whose weight ratio is in the range from 1 : 20 to 20 : 1.
5. The recording fluid according to at least one of claims 1 to 4, comprising up to 40 2% by weight of (b), based on the total weight of the recording fluid.

AMENDED SHEET

6. The recording fluid according to at least one of claims 1 to 5, comprising (d) at least one binder.
- 5 7. A process for producing a recording fluid according to claim 1 to 6, which comprises mixing
 - 10 (a) at least one colorant which is not completely polymer enveloped, selected from those colorants in particulate form where some colorant particles are completely polymer enveloped and others only incompletely, and those colorants in particulate form wherein some colorant particles are completely polymer enveloped and others not at all,
 - 15 (b) at least 2 wetting agents selected from alkoxylated alcohols of the formula $R^1O(AO)_xH$, where R^1 is C_1 - C_{30} -alkyl wherein one or else two nonadjacent CH_2 groups may be replaced by oxygen and wherein C_1 - C_{30} -alkyl may be unsubstituted or substituted with one or two hydroxyl groups, AO represents alkylene oxide, selected from ethylene oxide, propylene oxide and butylene oxide and x is an integer from 1 to 100, alkoxylated acetylene alcohols, alkoxylated or nonalkoxylated acetylenediols, alkylpolyglucosides,
 - 20 sugar ester alkoxylates, fluorosurfactants, anionic surfactants and cationic surfactants,
 - (c) if appropriate at least one dispersant,
 - (d) if appropriate at least one binder,
 - (e) water and
 - 25 (f) if appropriate further assistants

with each other in one or more steps.

- 8. The use of a recording fluid according to claim 1 to 6 or of a recording fluid produced according to claim 7 as an ink for the ink jet process.
- 9. The process for printing substrates by the ink jet process using a recording fluid according to at least one of claims 1 to 6 or of a recording fluid produced according to claim 7.
- 10. The process according to claim 9 when the substrates are textile substrates.
- 11. A printed substrate obtainable by a process according to claim 9 or 10.